

ABSTRACT

Rate computations are performed such as for use in scheduling activities, such as,
5 but not limited to packets, processes, traffic flow, etc. One implementation identifies an
approximated inverse rate, a fix-up adjustment value, and a quantum. An activity
measurement value is maintained based on a measure of activity, and a rate control value
is maintained based on the measure of activity and the approximated inverse rate. The fix-
up adjustment value is applied once each quantum to the rate control value to maintain
10 rate accuracy of the activity. In one implementation, the control value is a scheduling
value used for determining when to perform a next part of the activity (e.g., send one or
more packets). Scheduling rates are efficiently and compactly stored in an inverse form,
which may have advantages in terms of rate granularity, accuracy, and the ability to
deliver service smoothly.

15